

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A Lys-Lys binding site I which is a plasminogen fragment consisting of Kringle 1 to Kringle 3 of a human plasminogen with the N-terminal being lysine, which binding site binds to heparin and has the following properties:

- a. a molecular weight of 38 kDa;
- b. it is not glycosylated;
- c. it binds to heparin at pH lower than neutral pH but does not bind to heparin at neutral or higher pH, under physiologic ionic conditions;
- d. it inhibits lung tumor metastasis and lung tumor growth but has no ability to inhibit growth of endothelial cells of blood vessels;

wherein said plasminogen fragment is prepared by;

- a. preparing Lys-plasminogen from human plasminogen either by adding plasmin to a solution of human plasminogen or by incubating human plasminogen in the presence of ~~transexamic~~ tranexamic acid to autolysis;

- b. treating the Lys-plasminogen obtained in step
 - (a) with the elastase to produce fractions of the fragment comprising consisting of Kringle 1 to Kringle 3;
 - c. identifying subjecting the fractions of the fragment consisting of Kringle 1 to Kringle 3 obtained in step
 - (b) to heparin affinity chromatography for selecting heparin-binding fractions to obtain said plasminogen fragment which binds to heparin.

2. (Currently Amended) A process for preparing a plasminogen fragment consisting of Kringle 1 to Kringle 3 of a human plasminogen with the N-terminal being lysine, said fragment having the ability to inhibit lung tumor growth, but having no ability to inhibit growth of endothelial cells of blood vessels, comprising;

- a. preparing Lys-plasminogen from human plasminogen either by adding plasmin to a solution of human plasminogen or by incubating human plasminogen in the presence of tranexamic acid to autolysis;
- b. treating the Lys-plasminogen obtained in step
 - (a) with elastase to produce fractions of the fragment consisting of Kringle 1 to Kringle 3;
 - c. identifying subjecting the fractions of the fragment consisting of Kringle 1 to Kringle 3 obtained in step
 - (b) to heparin affinity chromatography for selecting heparin-

binding fractions to obtain said plasminogen fragment which binds to heparin; and

d. isolating the fragment which binds to heparin.

3. (Currently Amended) The process according to claim 2 wherein ~~the fragment which binds to heparin is recovered~~ the heparin affinity chromatography is performed by passing a solution of the fractions of the fragment consisting of Kringle 1 to Kringle 3 a Lys plasminogen lysate with elastase through a carrier to which heparin is coupled as a ligand to adsorb those fragments which bind to heparin, and eluting those fragments which do not bind to heparin.

4. (Previously Presented) A composition for inhibiting lung tumor metastasis and lung tumor growth comprising an effective amount of a fragment according to claim 1 and, optionally, a pharmaceutically acceptable carrier.